

Work Order ID 165765***165765***

Page 1

Monday, August 28, 2017 2:20:00 PM

Item ID: D412-769-011 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Aft Facing 2X2 Place Seat
Start Date: 8/28/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 9/6/2017 Req'd Qty: 1.00 ***1*** Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
IIN D412-769	Rev C								

100 Document Control 0.00
100 DOCUMENT CONTROL
DC Memo 0.00
Doc.Control -USB or Paperwork Photocopy bluefile & type labels per PPP D412-769-011 CHG 002

DAS
27
9-89

SEP 06 2017

105 Pick Kit 0.00
105
Packaging Memo 0.00
Packaging

AUG 29 2017

DAS
6
9-89
DAS
28
9-89

110 QC4- 100% Inspect kits for completeness 0.00
110
QC Memo 0.03
Quality Control

DAS
27
9-89

SEP 06 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

Work Order ID 165765

Monday, August 28, 2017 2:20:00 PM

165765

Page 2

Item ID: D412-769-011

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Aft Facing 2X2 Place Seat

Start Date: 8/28/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 9/6/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	Identify as per dwg & Stock Location: _____	0.00							
120	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-769-011								
	Location : FC000 fs 030								
130	QC21- Final Inspection - Work Order Release	0.00							
130									
QC	Memo	0.10							
Quality Control									

DAS
27
9-89
SEP 06 2017DAS
21
9-89
SEP 06 2017DAS
21
9-89
SEP 06 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Monday, August 28, 2017 2:19:58 PM

Page 1

Work Order ID: 165765

165765

Parent Item: D412-769-011

D412-769-011

Parent Item Name: Aft Facing 2X2 Place Seat

Start Date: 8/28/2017

Required Date: 9/6/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP rev A 08-07-17 new issue DD verified by:EC IPP Rev:B
10.03.23 as per IIN revC DD verified by:EC IPP REV:C 12.07.27 @
CHG002 (ECN12-621) DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D412-769-041 *D412-769-041* Aft Facing Seat, LH		Manufactured	No			110	Each	0.0000	1	1			DAS 6 9-89 28
D412-769-042 *D412-769-042* Aft Facing Seat, RH		Manufactured	No			110	Each	0.0000	1	1			DAS 6 9-89 28

DQA: _____ Date: _____



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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
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Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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Accept

N900040100Setup Start ***NS1***

Revision ID:

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Start Date: 8/28/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 9/6/2017 Req'd Qty: 1.00

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

IIN D412-769

Rev C

AUG 28 2017

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP D412-769-011 CHG 002

17/8/30

105

Pick Kit

0.00

105

Packaging

Memo

0.00

Packaging

110

QC4- 100% Inspect kits for completeness

0.00

110

QC

Memo

0.03

Quality Control

4. WEIGHT AND BALANCE

The following is the weight increase associated with the D412-769-XXX Kits. The installer is responsible for the weight of the equipment coming out of the helicopter in order to install the D412-769-XXX Aft Facing Seat kits.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D412-769-011	60.0 lb	0.0 in	0.00 in-lb	87.0 in	5220 in-lb
Aft Facing Seat kit	27.2 kg	0.0 m	0.00 m-kg	2.21 m	60.11 m-kg
D412-769-041	30.0 lb	-16.1 in	-483.0 in-lb	87.0 in	2610 in-lb
Aft Facing Seat, LH (normal position)	13.6 kg	-0.41 m	-5.58 m-kg	2.21 m	30.06 m-kg
D412-769-042	30.0 lb	+16.1 in	+483.0 in-lb	87.0 in	2610 in-lb
Aft Facing Seat, RH (normal position)	13.6 kg	+0.41 m	+5.58 m-kg	2.21 m	30.06 m-kg
D412-769-041	30.0 lb	-1.1 in	-33.0 in-lb	87.0 in	2610 in-lb
Aft Facing Seat, LH (center position)	13.6 kg	-0.03 m	-0.41 m-kg	2.21 m	30.06 m-kg
D412-769-042	30.0 lb	+1.1 in	+33.0 in-lb	87.0 in	2610 in-lb
Aft Facing Seat, RH (center position)	13.6 kg	+0.03 m	+0.41 m-kg	2.21 m	30.06 m-kg
D412-769-041	30.0 lb	+13.9 in	+417.0 in-lb	87.0 in	2610 in-lb
Aft Facing Seat, LH (right Position)	13.6 kg	+0.35 m	+4.76 m-kg	2.21 m	30.06 m-kg
D412-769-042	30.0 lb	-13.9 in	-417.0 in-lb	87.0 in	2610 in-lb
Aft Facing Seat, RH (left Position)	13.6 kg	-0.35 m	-4.76 m-kg	2.21 m	30.06 m-kg

5. PARTS LIST

Qty -011	Qty -041	Qty -042	Part Number	Description
X			D412-769-011	AFT FACING SEAT KIT
1	X		D412-769-041	AFT FACING SEAT, LH
1		X	D412-769-042	AFT FACING SEAT, RH
	1		D412-769-043	AFT FACING SEAT ASSEMBLY, LH
		1	D412-769-044	AFT FACING SEAT ASSEMBLY, RH
	1	1	D412-724-041	HEAD REST ASSEMBLY, CENTER
	1		D412-724-043	HEAD REST ASSEMBLY, LH
		1	D412-724-044	HEAD REST ASSEMBLY, RH

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Revision: C

Date: 09.11.26